CLAIMS

We claim:

1.   A composition, comprising a peptide having an amino acid sequence substantially as set forth in SEQ ID NO: 2 and a derivative, fragment, motif, analog or peptidomimetic thereof (MTLP).

2.   A composition, comprising a MTLP selected from the group consisting of an amino acid sequence substantially as set forth in SEQ ID NOS: 3-24 and a fragment, motif, derivative, analog or peptidomimetic thereof.

3.   The composition of claim 1, further comprising an active agent, wherein the MTLP is complexed to the active agent.

4.   The composition of claim 2, further comprising an active agent, wherein the MTLP is complexed to the active agent.

5.   The composition of claim 1, further comprising an active particle, wherein the MTLP is complexed to the active particle.

6.   The composition of claim 2, further comprising an active particle, wherein the MTLP is complexed to the active particle.

7.   A method for enhancing movement of an active agent across a lipid membrane, comprising a complex selected from the group consisting of a MTLP-active agent complex and a MTLP-active particle complex, wherein the MTLP enhances movement of the active agent across the lipid membrane.

8.   A method for enhancing movement of an active particle across a lipid membrane, comprising a MTLP-active particle complex, wherein the MTLP enhances movement of the active particle across the lipid membrane.

9.   A method for identifying a derivative of a MTLP having enhanced ability to transport an active agent across a lipid membrane, wherein the derivative of the MTLP competes for transport of fMLP across a membrane selected from the group consisting of a cell membrane, an intracellular membrane, the apical and basal membranes of an epithelial cell layer.

10.   The membrane of claim 9, wherein the epithelial cell layer is a polarized epithelial cell layer.

11.   A method for treating a pathological disorder in an animal, comprising orally administering to the animal in need of such treatment a complex selected from the group consisting of a MTLP-active agent complex and a MTLP-active particle complex, wherein an amount of the active agent effective to treat the pathological disorder is moved across the gastrointestinal epithelium of the animal into the circulation.